

7.0 Glossary

Alluvial fan	A fan-shaped deposit formed where a fast flowing stream flattens, slows, and spreads, typically occurring at the exit of a canyon onto a flatter plain.
Aquifer	A heterogeneous body of intercalated permeable and poorly permeable material that functions regionally as a water-yielding hydraulic unit; comprises 2 or more permeable beds separated at least locally by aquitards that impede groundwater movement.
Aquitard	A saturated, but poorly permeable, bed that impedes groundwater movement and does not yield water freely to wells.
Area of Potential Effects	Defined as “those areas in which impacts are planned or are likely to occur under Section 106 of the NHPA.”
Arkosic Sandstone	Coarse sandstone that has formed by the disintegration of granite without appreciable decomposition. It thus consists primarily of quartz and feldspar grains.
Baseline	Conditions existing prior to a specific activity.
Cairn	A man-made pile or stack of stones used as a landmark or monument.
Cambrian Period	The first geologic period of the Paleozoic Era, from 542 to 489 million years ago.
Carbonaceous	Carbon rich.
Claystone	Fine-grained rock consisting of compacted clay particles.
Confined Aquifer	An aquifer in which the water is under pressure because of an impermeable layer above it that keeps it from seeking its level.
Connected Action	Those actions that are “closely related” and “should be discussed” in the same NEPA document (40 CFR 1508.25 (a)(1)). Actions are connected if they automatically trigger other actions that may require an EIS; cannot or will not proceed unless other actions are taken previously or simultaneously; or if the actions are interdependent parts of a larger action and depend upon the larger action for their justification (40 CFR 1508.25 (a)(1)). Connected actions are limited to actions that are currently proposed (ripe for decision). Actions that are not yet proposed are not connected actions, but may need to be analyzed in cumulative effects analysis if they are reasonably foreseeable.
Cumulative Effect	The impact on the environment which results from the incremental impact of the action when added to other past and present actions and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such actions (40 CFR 1508.7) and (40 CFR 1508.25).
Daughter Products	A product of radioactive decay of an element. Uranium belongs to the actinium series; daughter products in this series include uranium, actinium, and thorium.
Deep Disposal Well	Well for disposal of waste water by injection into deep aquifers. Frequently called injection wells, the term deep disposal well is used in this document to distinguish them from the injection wells that are part of the ISR process.
Direct Effect	Those effects which are caused by the action and occur at the same time and place (40 CFR 1508.8[a]).
Eocene Epoch	The second epoch of the Paleocene Period in the Cenozoic Era, lasting from about 56 to 34 million years ago.

Ephemeral	Short lived.
Feldspathic Sandstone	Sandstones that contain less than 90 percent quartz, and more feldspar than unstable lithic fragments, and minor accessory minerals, and are derived from granitic-type, primary crystalline, rocks.
Flume	An open artificial water channel, in the form of a gravity chute, that leads water from a diversion dam or weir completely aside a natural flow.
Geological Epoch	A subdivision of a geological period.
Geological Period	A subdivision of a geological era.
Geometric Spreading	The spread of sound energy as a result of the expansion of the wavefronts. The sound level from a point source is reduced by 6 dB for each doubling of distance from the source.
Headcutting	A process of erosion that lengthens a drainage, stream, valley, or gulley at its head, and also enlarges its drainage basin. Water erodes the rock and soil at the head of a drainage in the opposite direction that it flows.
Historic Property	Defined in the NHPA as: "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on the National Register"; this includes artifacts, records, and remains which are related to such district, site, building, structure, or objects.
Indirect Effect	Effects that are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on water and air and other natural systems, including ecosystems" (40 CFR 1508.8[b]).
Irretrievable Commitment of Resources	The loss of production harvest, or use of renewable resources that is not recoverable for use by future generations. These commitments may be reversible, but losses that occur during the federal action are not necessarily retrievable.
Irreversible Commitment of Resources	The loss of future options for a resource, due to primary or secondary impacts.
Key Observation Point	"One or a series of points on a travel route or at a use area or a potential use area, where the view of a management activity would be most revealing" (BLM 2007b). KOPs are commonly selected to represent the most sensitive viewpoints for a proposed management activity based on the number of peoples who would experience them or the frequency and duration of viewing.
Lithologic logs	A record of the lithology of the rock and soil encountered in a borehole from the surface to the bottom. Also known as a well log.
Lixiviant	A liquid medium, either acid or base in nature, used to selectively extract target metals from an ore or mineral by assisting in rapid and complete leaching.
Mining	<i>BLM considers mining to be activities managed under the 43 CFR 3809 regulations, which includes ISR. NRC defines ISR activities as milling.</i>
Mitigation	Measures or procedures which could reduce or avoid adverse impacts and have not been incorporated into the proposed action or an alternative. Mitigation can be applied to reduce or avoid adverse effects to biological, physical, or socioeconomic resources.
Mudstone	A dark sedimentary rock formed from consolidated mud and lacking the layered structure of shale.

Perennial	Occurring continuously throughout a year.
Potentiometric Surface	A hypothetical surface representing the level to which groundwater would rise if not trapped in a confined aquifer. The potentiometric surface is equivalent to the water table in an unconfined aquifer.
Precambrian	A supereon in the geologic time scale that spans from the formation of Earth around 4,600 million years ago to the beginning of the Cambrian Period, approximately 542 million years ago.
Production Well	An ISR well from which pregnant solution (lixiviant with concentrated metal) is pulled.
Q/D Ratio	The ratio of emissions (Q) to distance from monitor (D) for individual sources. Used to calculate the estimated level of air quality impacts.
Quaternary Period	The most recent of the three periods of the Cenozoic Era in the geologic time scale, spanning 2.6 million years ago to the present.
Residual Impacts	Those effects remaining after mitigation has been applied to the proposed action or an alternative.
Sandstone	Sedimentary rock consisting of sand or grains cemented together. Typically red, yellow, or brown in color.
Shale	A rock predominantly composed of clay-sized particle and characterized by parallel bedding planes.
Stream Channel	The physical confine of a stream, consisting of a bed and stream bank.
Subbasin	A subset of a subwatershed.
Subsidence	Sinking or settlement of the land surface, usually related to vertical downward movement of natural surfaces, although small-scale horizontal components may be present.
Subsoiling	A method of relieving soil compactions through fracturing compacted soils without disturbing plant life, topsoil, and surface residue. Equipment used for this process is called a subsoiler.
Subwatershed	Topographic perimeter of the catchment area of a stream tributary.
Tertiary Period	The span of geologic time stretching from 65 million to 5 million years ago.
Total Dissolved Solids	All organic and inorganic materials suspended in water that are small enough to remain in the water after filtration.
Transmissivity	A measure of the quantity of water that an aquifer can transmit horizontally.
Tuffaceous	Rock composed of compacted volcanic ash.
Unconformed Geological Layers	Formations that are separated by an erosional surface.
U ₃ O ₈	uranium oxide.
Visual Resource	The composite of basic terrain, geologic features, water features, vegetation patterns, and land use effects that typify a land unit and influence the visual appeal the unit may have for viewers.

Visual Resource Classes	“Visual resource classes are categories assigned to public lands which serve two purposes: 1) an inventory tool that portrays the relative value of the visual resources; and 2) a management tool that portrays the visual management objectives (for a particular area) (BLM 2007a). Inventory classes are assigned through the inventory process; and management classes are assigned through the Resource Management Planning (RMP) process.
Water Fence	A line of water injection wells used as a hydrologic barrier to set up a barrier - or fence - of water that prevents migration of groundwater constituents into an area beyond the water fence.
Watershed	The land area that drains into a stream; the watershed for a major river may encompass a number of smaller watersheds that ultimately combine at a common point.
Weir	A dam placed across a river or canal to raise or divert the water, as for a millrace, or to regulate or measure the flow.
Well Field	<i>A portion of a mine unit consisting of a header house, all injection, production, and monitoring wells associated with the header house, and all roads, pipelines, and power lines used to construct or service those wells.</i>
Yellowcake	<i>The product of the uranium extraction process; a stable uranium concentrate powder obtained from leach solutions, in an intermediate step in the processing of uranium ores, and commonly assayed as pounds U_3O_8 equivalent.</i>